IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

			(Case No	o. 98,609))	
In the Applic	ation o	of:	0)		
	Pesh	kin, et al	SEP 1 0 2001 &)	Examiner: J. Thompson	
Serial No.:	09/3	07,357	TRADEMARK!)	Group Art Unit: 2855	
Filed:	May	7, 1999)		
For:			ND APPARATUS SENSORS)		
Commissione Washington,						ECHIC 2024 SELLES 2800
			TRANSMIT	TAL LE	ГТЕR	1000
Sir:						EST.TER
In reg	ard to	the abov	e identified applicat	ion:	·	2800
1.	We a	are transr	mitting herewith the	attached:		
	a.	Transm	ittal Letter.			
	b.	Petition	to Withdraw Holdi	ng of Aba	andonment.	
	c.	Copy of	f Office Action Sum	mary date	ed December 12, 2000.	
	d.	Copy of	f Notice of Referenc	es Cited.		
	e.	Copy of	f Interview Summar	y.		
	f.	Copy of	f Detailed Action, da	ated Dece	mber 7, 2000.	
	g.	Copy of	Response to Decen	nber 12, 2	2000 Office Action, dated J	une 12, 2001.
	h.	to Offic	e Action, Return Re	ceipt Pos	ime under 37 CFR 1.136(a) tcard, Petition Fee check for it, dated June 14, 2001.	
	i.	Return ?	Receipt Postcard.			·
2.	With	respect	to additional fees:			
. <u> </u>	_	A.	No additional fee i	is require	d.	
		B.	Attached is a chec	k in the a	mount of \$	

- 3. Please charge any additional fees or credit overpayment to Deposit Account No. 13-2490.
- 4. CERTIFICATE OF MAILING UNDER 37 CFR § 1.8: The undersigned hereby certifies that this Transmittal Letter and the paper, as described in paragraph 1 hereinabove, are being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231 on this 31st day of August, 2001.

Date: August 31, 2001

Mark W. Triplett

Registration No. P-49,002



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE (Case No. 98,609)

2/20/02

In the Application of:)
	Peshkin, et al.) Examiner: J. Thompson
Serial No.:	09/307,357) Group Art Unit: 2855
Filed:	May 7, 1999	
For:	METHOD AND APPARATUS FOR FORCE SENSORS)))

PETITION TO WITHDRAW HOLDING OF ABANDONMENT

Commissioner for Patents Washington, D.C. 20231

Sir:

Pursuant to 37 CFR 1.81(a), Applicants respectfully petition to request withdrawal of holding of abandonment for the above-mentioned patent application. On June 12, 2001, Applicants' timely filed a response with a 3-month shortened statutory period and Petition for 3-months extension to the Office Action of December 12, 2000.

Applicants' representative by his signature below attests on a personal knowledge basis to the timely mailing, and that this Petition to withdrawal holding of abandonment is made without undue delay. Enclosed with this Petition is an additional copy of the previously mailed correspondence including a copy of the Office Action, Response to the Office Action, Petition for Extension of Time under 37 CFR 1.136(a) and check, Return Receipt Postcard and the Returned Receipt Postcard from the USPTO, and Transmittal letter including the Certificate of Mailing under 37 CFR 1.8.

Dated: August 31, 2001

Respectfully submitted,

Mark W. Triplett Registration No. P-49,002



CHICAGO H. 60606

UNITED STATES DEPARAMENT OF COMMERCE

Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS

Washington, D.C. 20231

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO.

09/307.357 05/07/99 PESHKIN M 98.609

EXAMINER

020308 MMC1/1212

MCDONNELL BOEHNEN HULBERT & BERGHOFF TARTUNITURE PAPER NUMBER
300 SOUTH WACKER DRIVE

DATE MAILED:

112/12/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

DOCKETED

DEC 1 8 2000

DUE DATE: 3/12/01

BY: K.B. AB

RECEIVED
TECHNOLOGY CENTER 2800



Application No.

Applicant(s)

Examiner

Group Art Unit 2855

Peshkin et al

09/307.357

Jewel Thompson

X Responsive to communication(s) filed on May 7, 1999 This action is FINAL. Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213. A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a). Disposition of Claims ______is/are pending in the application. X: Claim(s) 1-26 Of the above, claim(s) 20-24 is/are withdrawn from consideration. Claim(s) _____ Claim(s) ______ is/are objected to. are subject to restriction or election requirement. ☐ Claims Application Papers X See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948. ☐ The drawing(s) filed on is/are objected to by the Examiner. ☐ The proposed drawing correction, filed on is ☐approved ☐disapproved. The specification is objected to by the Examiner. The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. § 119 Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d). ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been. received. received in Application No. (Series Code/Serial Number) received in this national stage application from the International Bureau (PCT Rule 17.2(a)). *Certified copies not received: Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- X Notice of References Cited, PTO-892
- Information Disclosure Statement(s), PTO-1449, Paper No(s).
- X Interview Summary, PTO-413
- Notice of Draftsperson's Patent Drawing Review, PTO-948
- Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

SEP 1 0 2001 &

Notice of References Cited

Application No.

O9/307,357

Peshkin et al

Examiner

Group Art Unit

Jewel Thompson

2855

Page 3 of 1

			Jev	ve: I nompson 	2655		age 1011
U.S. PATENT DOCUMENTS							
	DOCUMENT NO.	DATE	NAME C		CLASS	SUBCLASS	
. A	6,033,309	3/7/2000		Couch et al.		463	38
В	5,451,852	9/19/1995		Gusakov		318	611
С	6,004,134	12/21/1999		Marcus et al.		434	45
D	5,831,554	11/3/1998		Hedayat et al.		341	20
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Application/Control Number: 09/307,357

SEP 10 2011 2855

DETAILED ACTION

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- Claims 1-19, 25 and 26 are, drawn to a force sensor, classified in class 73, subclass 862.53.
- II. Claims 20-24, drawn to an optical system and method, classified in class 250, subclass 200.
- 2. The inventions are distinct, each from the other because of the following reasons: Inventions I and II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions was of applying and measuring force, one mechanical and the other optical.
- 3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
- 4. During a telephone conversation with George Lee on December 7, 2000 a provisional election was made without traverse to prosecute the invention of a force sensor measuring applied forces, claims 1-19, 25 and 26. Affirmation of this election must be made by applicant in replying to this Office action. Claims 20-24 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Application/Control Number: 09/307,357 Page 3

Art Unit: 2855

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the

inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently

named inventors is no longer an inventor of at least one claim remaining in the application. Any

amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the

fee required under 37 CFR 1.17(I).

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for

omitting essential structural cooperative relationships of elements, such omission amounting to a

gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural

cooperative relationships are: In claim 1, there is no structural connection between the readout

mechanism and the force sensor.

Page 4

Art Unit: 2855

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

Application/Control Number: 09/307,357

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 9. Claims 1-3, 5 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Couch et al. (6,033,309).

Couch et al teaches the aspects of the claimed invention, a force sensor measuring applied forces, comprising:

a first member (22);

a second member, wherein the first member is positioned nearby to the second member (20);

a flexure (16), the flexure connecting the first member and the second member, wherein the flexure, supports the first member with respect to the second member and allows the first member to move relative to the second member along two axes (fig.s 1-3);

a readout mechanism measuring the displacement of the first member relative to the second member, wherein the applied forces are determined from the displacement of the first member relative to the second member (col. 2, lines 5-21);

the first member comprises an inner member and the second member comprises an outer member (fig. 2);

Application/Control Number: 09/307,357

Art Unit: 2855

the readout mechanism comprises an optical electronic device (col. lines 5-21);
a graspable handle (14), the graspable handle connected to the first member (figs. 1 and 2);
the handle is integrally formed with the first member (fig. 3);

Claim Rejections - 35 USC § 103

- 10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claims 4, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Couch et al. (6,033,309) in view of Gusakov (5,451,852).

Couch et al. teaches the aspects of the claimed invention except the readout mechanism comprises an inductive readout device. Gusakov teaches a joystick which comprises two transducer which are inductive transducers and are used to measure force. It would have been obvious to one skilled in the art at the time that the invention was made to have used the inductive

Application/Control Number: 09/307,357

Page 6

Art Unit: 2855

transducers of Gusakov in the device of Couch et al. in order to measure the force applied to the

joystick.

The claim methods 25 and 26 have been rejected. The method here is nothing more than using

the apparatus of the instant invention. Accordingly, the method claims are rejected for the same

reasons.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

6,004,134 Marcus et al. teaches an interactive simulation including force feedback

5,831,554

Hedayat et al. teaches an angular position sensor for pivoted control devices

13. Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Jewel Thompson at (703) 308-6726. The examiner can normally be reached

on Mon-Fri. From 8:00am to 4:30pm. The fax phone number for this Group 703-308-7722. If

attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ben

Fuller, can be reached on (703) 308-0079.

/jvt

December 7, 2000

18RL



Application No. 09/307,357

Jewel Thompson

Applicant(s)

Examiner

Group Art Unit

2855

Peshkin et al



All participants (applicant, applicant's representative, PTO personnel):
(1) Jewel Thompson (3)
(2) George Lee (4)
Date of Interview Dec 7, 2000
Type: 🔀 Telephonic 🗌 Personal (copy is given to 🔲 applicant 🔲 applicant's representative).
Exhibit shown or demonstration conducted: Yes No. If yes, brief description:
Agreement X was reached. was not reached.
Claim(s) discussed: 1-26
Identification of prior art discussed: none
Restriction/Election was elected by the applicant's representative. See paper no. 4
(A fuller description, if necessary, and a copy of the amendments, if available, which the examiner agreed would render the claims allowable must be attached. Also, where no copy of the amendents which would render the claims allowable is available, a summary thereof must be attached.)
1. It is not necessary for applicant to provide a separate record of the substance of the interview.
Unless the paragraph above has been checked to indicate to the contrary, A FORMAL WRITTEN RESPONSE TO THE LAST OFFICE ACTION IS NOT WAIVED AND MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a response to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW.
2. Since the Examiner's interview summary above (including any attachments) reflects a complete response to each of the objections, rejections and requirements that may be present in the last Office action, and since the claims are now allowable, this completed form is considered to fulfill the response requirements of the last Office action. Applicant is not relieved from providing a separate record of the interview unless box 1 above is also checked.
Examiner Note: You must sign and stamp this form unless it is an attachment to a signed Office action.

PATENT

	IN THE UNITED STATES PATEN				
	OIP Case No.	98,609)			
In the App	Peshkin, et al.)))			
Serial No.:	: 09/307,357) Examiner: J. Thompson			
Filing Date	e: May 7, 1999) Group Art Unit: 2855			
For:	METHOD AND APPARATUS FOR FORCE SENSORS))			
	TRANSMITTA	L LETTER			
	oner for Patents n, D.C. 20231				
Dear Sir:			TECHNOLOGY CENTER		
In 1	regard to the above identified application,		1507(JOE CE
1. We	e are transmitting herewith the attached:		CENT	1 4 203	ECEIVE
a) b) c)	Petition for Extension of Time under 3 Response to Office Action Return Receipt Postcard	7 CFR 1.136(a)	ER 2800	ت	
2. Wit	th respect to fees:				
a) b)	A check in the amount of \$445.00 is en Please charge any underpayment or of 13-2490.		Accour	ıt, No	0.

3. CERTIFICATE OF MAILING UNDER 37 CFR § 1.8: The undersigned hereby certifies that this Transmittal Letter and the paper, as described in paragraph 1, are being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to the Commissioner for Patents, Washington, D.C. 20231 on June 12, 2001.

Respectfully submitted,

George I. Lee

Registration No. 39,269



PETITION EOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)

	<u>.</u>	Attorney Docket No.:	98,609		
ADDRESS TO:		Application No.:	09/307,357		
Commissioner for Patents Washington, D.C. 20231		USPTO Confirmation No.:			
• • • • • • • • • • • • • • • • • • •		Filing Date:	05/07/99		
		First Named Inventor:	Michael A. Peshkin		
		Group Art Unit:	2855		
		Examiner:	J. Thompson		
· ·	est under the provisions of 37 pove identified application to a	- ·			
	The requested extension and appropriate non-small-entity fee are as follows (check time period desired):				
☐ One Month (37 CFR 1.17(a)(1)) \$ ☐ Two Months (37 CFR 1.17(a)(2)) \$ ☐ Three Months (37 CFR 1.17(a)(3)) \$890.0 ☐ Four Months (37 CFR 1.17(a)(4)) \$ ☐ Five Months (37 CFR 1.17(a)(5)) \$			\$ \$890.00 \$		
Applicant claims small entity status. See 37 CFR 1.27. Therefore, the fee amount shown above is reduced by one-half, and the resulting fee is: \$445.00. A check in the amount of the fee is enclosed. The Commissioner is hereby authorized to charge any fees which may be required or to credit any overpayment to Deposit Account Number 13-2490. I have enclosed a duplicate copy of this sheet.					
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED					
Name	George I. Lee				
Reg. No.	39,269	Λ			
Signature	Heory d.	Lec			
Date	June 12, 2001				

Hon. Commissioner of

09/307,357

GIL Atty

Patents and Trademarks

Re: Applicant - Peshkin et al.

Case No. 98,609

Method and Apparatus for Force Sensors

Sir:

Please place the Patent Office receipt stamp hereon and mail to acknowledge receipt of:

Transmittal Letter

Petition for Extension of Time under 37 CFR 1.136(a)

Response to Office Action

Other: Certificate of Mailing

Fee Enclosed

\$ <u>445.00</u>

Respectfully,

McDonnell Boehnen Hulbert & Berghoff

Attorney for Applicant

Mailed: June 12, 2001

29081

MC DONNELL BOEHNEN **HULBERT & BERGHOFF**

300 S. WACKER DR., 32ND FLOOR CHICAGO, IL 60606-6701

FIRSTAR BANK, N.A. 70-477-719

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CHECK DATE

VENDOR NO.

06/12/01

AS0601

CHECK AMOUNT

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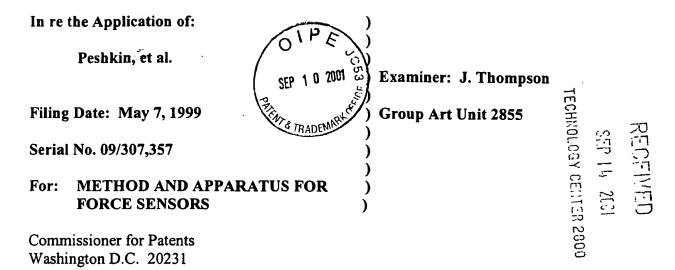
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Commissioner of Patents

#029081# #071904779#

1707962911

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE (Case No. 98,609)



RESPONSE TO OFFICE ACTION

In response to the Office Action mailed December 12, 2000, Applicants submit the following remarks. Enclosed herewith is a petition for a 3 month extension of time and the requisite fee.

REMARKS

Applicants affirm the election of Claims 1-19 and 25, 26 which are currently pending in the case. In the Office Action mailed December 12, 2000, the Examiner rejected claims 1-19 under 35 U.S.C. §112 as omitting essential structural cooperation between the readout mechanism and the force sensor.

Claims 1-3, 5 and 6 were rejected under 35 U.S.C. §102 as anticipated by Couch (6,003,309). Claims 4, 25 and 26 were rejected under 35 U.S.C. §103(a) as unpatentable over Couch and further in view Gusakov (5,451,852).

With respect to the rejection under section 112, the readout mechanism is indeed connected to the force sensor through the claim language "wherein the applied forces are determined from the displacement of the first member relative to the second member." The force

sensor of the preamble is for "measuring applied forces" and it is the claimed first and second members that determine the applied forces. Thus, Applicants respectively traverse the rejection under Section 112.

Moreover, because Couch does not teach all the claim limitations, the Applicants respectfully traverse the rejection of Claims 1-19, 25 and 26. Couch does not show the Applicants' claimed flexure 40 as shown in FIG. 3. As shown in FIG. 3 and described on pages 14, line 19 to page 15 line 18, the claimed flexure 40 has a structure of overlapping rectangular strips 70, 72, 74, 76. In contrast, the cited Couch article shows only a conventional spring 16. Thus, Couch does not teach nor suggest all the claimed elements. In addition, because Gusakov does not teach nor suggest the claimed flexure structure, the combination of Couch and Gusakov does not provide all the claimed elements.

For the reasons presented above, the Applicant respectfully traverses the rejections and submits that the presently claimed invention is patentably distinct over the Couch and Gusakov references, whether taken alone or in combination.

CONCLUSION

The cited art fails to disclose, teach or suggest, either individually or in combination, all of the limitations of the pending claims. The features of the Applicant's invention are not disclosed, suggested or taught by the cited references.

MCDONNELL BOEHNEN HULBERT & BERGHOFF 300 SOUTH WACKER DRIVE CHICAGO, ILLINOIS 60606 TELEPHONE (312) 913-0001 For the reasons provided above, Applicant submits that all of the pending Claims 1-19 and 25-26 are in condition for allowance. Therefore, Applicant respectfully requests favorable reconsideration.

Respectfully submitted,

McDONNELL BOEHNEN HULBERT & BERGHOFF

Date: 6/12/01

By:

George I. Lee

Registration No. 39,269

300 South Wacker Drive Chicago, Illinois 60606 Telephone: (312) 913-0001

Facsimile: (312) 913-0002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

	(Case No. 98,609)
In the Applica	ation of:
	Peshkin, et al. (SEP 1 0 2001 SS) Examiner: J. Thompson
Serial No.:	09/307,357 Croup Art Unit: 2855
Filed:	May 7, 1999)
For:	METHOD AND APPARATUS) FOR FORCE SENSORS)
Commissione Washington,	
	TRANSMITTAL LETTER
Sir:	
In reg	ard to the above identified application: We are transmitting herewith the attached:
1.	ard to the above identified application: We are transmitting herewith the attached: a. Transmittal Letter.
	a. Transmittal Letter.
	b. Petition to Withdraw Holding of Abandonment.
	c. Copy of Office Action Summary dated December 12, 2000.
	d. Copy of Notice of References Cited.
	e. Copy of Interview Summary.
	f. Copy of Detailed Action, dated December 7, 2000.
	g. Copy of Response to December 12, 2000 Office Action, dated June 12, 2001.
•	h. Copies of Petition for Extension of Time under 37 CFR 1.136(a), Response to Office Action, Return Receipt Postcard, Petition Fee check for \$445.00, and stamped Return Receipt Postcard, dated June 14, 2001.
•	i. Return Receipt Postcard.
2.	With respect to additional fees:
x	A. No additional fee is required.

Attached is a check in the amount of \$_

B.

- 3. Please charge any additional fees or credit overpayment to Deposit Account No. 13-2490.
- 4. CERTIFICATE OF MAILING UNDER 37 CFR § 1.8: The undersigned hereby certifies that this Transmittal Letter and the paper, as described in paragraph 1 hereinabove, are being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231 on this 31st day of August, 2001.

Date: August 31, 2001

Mark W. Triplett

Registration No. P-49,002

Hon. Commissioner of

09/307,357

Atty GIL

Patenta and Trademarks

as. Applicant - Peshkin et al.

Case No. 98,609

Method and Apparatus for Force Sensors

Sir:

Please place the Patent Office receipt stamp hereon and mail to acknowledge

▼ Transmittal Letter

Petition for Extension of Time under 37 CFR 1.136(a)

Response to Office Action

Other: Certificate of Mailing

Fee Enclosed

\$ 445.00

Respectfully

McDonnell Boehnen Hulbert & Berghoff Attorney for Applicant

..., 2004